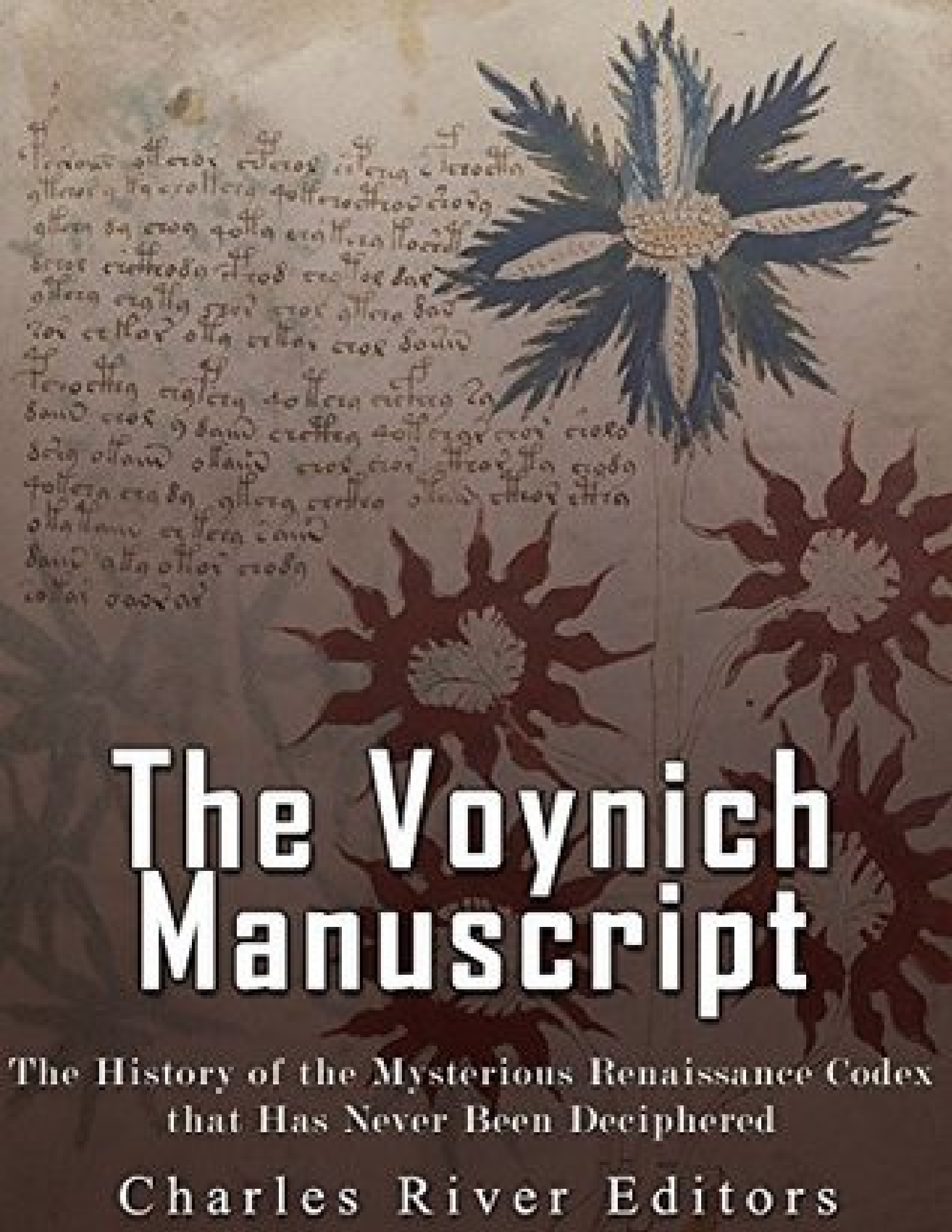
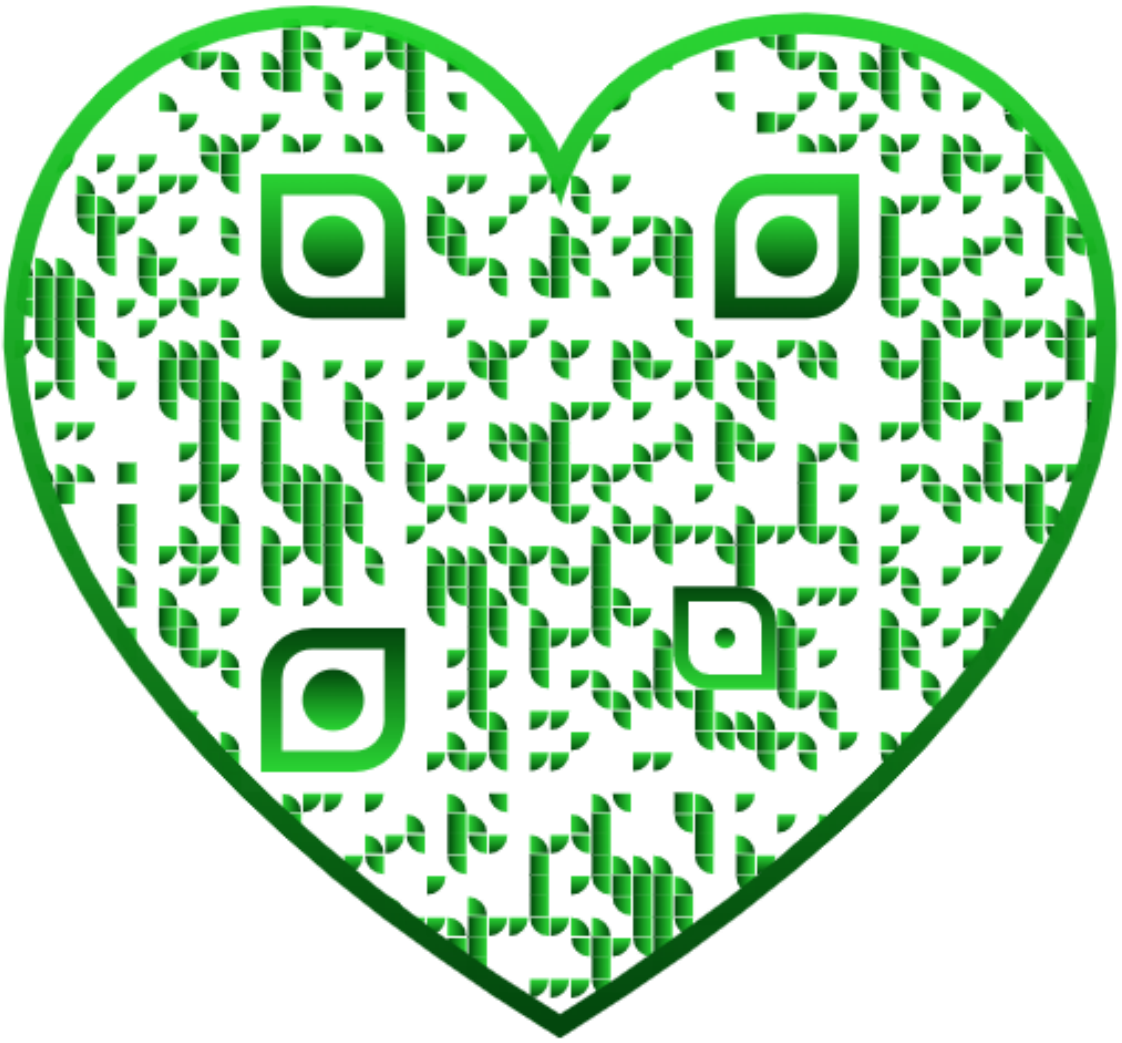


The Voynich Manuscript

The History of the Mysterious Renaissance Codex that Has Never Been Deciphered

Charles River Editors



The Voynich Manuscript: The History of the Mysterious Renaissance Codex that Has Never Been Deciphered

By Charles River Editors

A page from the manuscript

About Charles River Editors

Charles River Editors is a boutique digital publishing company, specializing in bringing history back to life with educational and engaging books on a wide range of topics. Keep up to date with our new and free offerings with this 5 second sign up on our weekly mailing list , and visit Our Kindle Author Page to see other recently published Kindle titles.

We make these books for you and always want to know our readers' opinions, so we encourage you to leave reviews and look forward to publishing new and exciting titles each week.

Introduction

A page from the manuscript

The Voynich Manuscript

“Yet it may be roundly asserted that human ingenuity cannot concoct a cipher which human ingenuity cannot resolve.” – Edgar Allan Poe, excerpt from “A Few Words On Secret Writing,” 1841

Some might remember confiding in a sibling about parties, secret sweethearts, and other hush-hush topics in the presence of their parents, baffling them with one's fluency in Pig Latin. Others might remember composing wacky lexicons intelligible only to themselves and their best friends. This came especially handy whenever a teacher intercepted one of their messages, for they could not embarrass the note-passers if they could not read the note.

On the other end of the spectrum are the military cryptographers, professionals who make their livings deconstructing and decoding the messages of enemy forces. Whatever the scale, man has always been drawn to the phenomenon of inventing riddles and challenges designed to stump the

world's most brilliant minds. Likewise, humans are born with a hunger to decrypt the seemingly impossible, to the extent that for some it can only be described as an obsession. One such entity to put these inquisitive minds to the test – one like no other – is the legendary Voynich Manuscript.

The Voynich Manuscript: The History of the Mysterious Renaissance Codex that Has Never Been Deciphered explores the history of the cryptic codex, the minds that attempted to tackle it, and aims to examine both credible and ludicrous interpretations and theories from various angles. Along with pictures depicting important people, places, and events, you will learn about the Voynich Manuscript like never before.

The Voynich Manuscript: The History of the Mysterious Renaissance Codex that Has Never Been Deciphered
About Charles River Editors
Introduction
- Voynich and His Ugly Duckling
- Skimming the Manuscript
- Three Magi and a King
- Voynich’s Unraveling
- Legacy
- Online Resources
- Bibliography

Free Books by Charles River Editors
Discounted Books by Charles River Editors

Voynich and His Ugly Duckling

For as long as language and communication have existed, humans have been inventing ways to mask their messages from prying eyes. Military and diplomatic officials often devise secret codes to transmit sensitive data and confidential information to approved parties. This practice has become so commonplace in recent years that entire sciences, hobbies, and fully fledged professions have been established to decipher these cryptic texts, called "cryptographers."

What is known to be the first evidence of cryptography dates back to the 19th century BCE. Archaeologists fumbled when they stumbled upon the inscription etched into the eternal resting chamber of Khnumhotep II, an Egyptian aristocrat. Hieroglyphic symbols with similar meanings, a synonym of some sort, were used to replace "ordinary" hieroglyphs. While its intention was not to disguise the message but to elevate it, it has since been described as mankind's first attempt at the "deliberate transformation of writing." Mesopotamians, Babylonians, Indians, Assyrians, Romans, and just about every other powerhouse civilization in antiquity also dabbled with the primitive science.

In the year 5 BCE, the Spartans engineered a cylindrical, scroll-shaped device dubbed the " *Scytale* , " which allowed them to relay their next moves, alerts to changes in positions and techniques, and other secret messages without tipping off the enemy forces. Thin coils of leather with widths about the size of a tassel from a cheerleader's pom-pom were twined around the *Scytale,* and the message was scrawled onto the rings of leather. Categorized as a "transposition" cipher, the letters written onto the coils of leather seemed nonsensical when unfurled, as they could only be solved by winding them around a *Scytale* of the same breadth.

Needless to say, these revolutionary methods of cryptography, though historic, are now considered archaic. Their simplistic secrets have been disclosed to the general public, and even incorporated into children's toys geared towards aspiring spies. With the bulk of modern civilization so dependent on the virtual world, secret codes have evolved to a whole new

level, most notably through data encryption. Data encryption, which aims to conceal classified electronic information through the use of complex ciphers and algorithms, was initially used for governmental and military purposes, but it now acts as the primary medium of security that most online platforms (as of January 2017, at least half of them) provide for their users.

As intricate and inextricable as data encryption might seem to people today, a growing number of brilliant but devious minds continue to successfully find ways to bypass supposedly state-of-the-art encryption software, rendering the efforts of the enormous teams employed to handle online security void. As a matter of fact, stories of unscrupulous hackers stealing episodes of popular TV shows and threatening to unleash them before their release dates, as well as reprobates poaching private images of unfortunate victims for ransom, are becoming increasingly commonplace. Meanwhile, government agencies are staffed with full-type cryptanalysts dedicated to retrieving encrypted intelligence and decoding them in the hopes of learning more about or thwarting potential domestic and foreign threats.

With such incisive minds constantly at work, one could be forgiven for assuming there are no ciphers left unsolved. On the contrary, there exists quite a diverse array of both ancient and modern-day cryptographic challenges that have stumped even the most seasoned code crackers of today, and maybe even for generations to come. Among the most famous of these mysterious memorandums is a 600 year old document that continues to mystify those that lay their eyes upon it, whether it is for the first time or the millionth time: the one and only Voynich Manuscript.

To best understand the enigma that is the Voynich Manuscript, one must first dive into the life of the fascinating man who chanced upon it.
Michal Habdank-Wojnicz was born on the eve of All Hallows' Day in 1865 into what is now the Lithuanian city of Telšiai. Not much is known about his parents, apart from the fact that they were Polish-born and were of noble class with some political influence in the turbulent Russian Empire. Michal was proud of his roots, and as a teenager, he often signed documents with his alternative moniker, Wilfrid de Voynich, to showcase his blue blood.

Voynich

Before the age of 6, Michal was relocated to the northeastern Polish town of Suwalki. Here, he attended the local *gimnazjum* (junior grammar school), where he caught the eye of his instructors not only for his exceptional grades, but his preference for solitude. Rather than romp around the playground with the other children, Michal would much rather curl up under a tree or stow himself away in a corner, his nose buried in a book.

Michal was clearly more privileged than most, for records point to him being enrolled in the universities of Warsaw, St. Petersburg, and Moscow towards the end of his youth. It was ultimately at Moscow University that the board awarded him a diploma and a degree for chemistry. Not long after that, he acquired a license as a pharmacist.

He spent some time in an apothecary, donning a crisp dark suit as he

manned the counter, surrounded by shelves and display cabinets stocked with syrup bottles, colorful jars of herbs, vials of rare oils, medicinal balms, and whatnot. But it soon became clear that while the static and somewhat repetitive life of portioning out powders and doling out potions was all well and good, there was no spring in his step when he opened up shop each morning.

Like many university-bred youngsters his age, Michal became both inspirited and impassioned about the stormy political affairs in Poland at the time. In 1885, the 20-year-old returned to the city of one of his alma maters, Warsaw, and enlisted in the socialist sympathizer Ludwik Waryński's workers' party, the *"Proletarjat ."* Michal was also known to be a vehement supporter of Sergey Stepnyak-Kravchinsky, a Ukrainian revolutionary with democratic ideals who often preached to the peasant classes and incited insurgencies against autocratic rule, namely Tsar Alexander II of Russia.

Sergey Stepnyak-Kravchinsky

A year later, Michal attempted to free the captured conspirators, Stanislaw Kunicki and Piotr Bardowski, fighters for national liberation who had been sentenced to the gallows at the Warsaw Citadel for their alleged scheming against the government. However, Michal was nabbed in the process by Russian officials himself when a “police spy” singled him out to the authorities. All the other revolutionaries were executed, and the thrashing and flailing Michal was squashed into a squalid cell and placed under solitary confinement in the citadel basement, spared because of his nobility. It is unclear how long Michal was locked up for, but it was long enough for him to be inflicted with tuberculosis and a permanently hunched back.

Michal eventually managed to slither out of his cell, and shortly after that, he picked up from where he had left off and resumed his anti-autocracy activities, the fire in him burning brighter than ever. Unfortunately, authorities again caught up with him, and this time, they penalized him with a lifetime of hard labor in the Siberian salt mines of Tunka.

Michal was as slippery as he was slick, and he eventually slipped from the grasp of the authorities once more. He wore the wounds he received from narrowly escaping his captors like badges of honor. Later in life, he would unbutton his shirt to those who begged to hear about his adventures in his past life, and he explained the 3 scars on his torso. “Here I have a sword,” he said. “Here I have a sword, and here I have a bullet.”

Upon escaping the guards at the salt mines, Michal hightailed it to the nearby city of Irkutsk, where he was taken in by the Karauloff family. After feeding him and providing him with a hot shower and a meal, the Karauloffs talked him into shedding all his connections in Russia and starting anew in England. Before sending him off, the Karauloffs inserted a slip of paper with Stepnyak-Kravchinsky's name and London address into the small satchel they had packed for him. Under Stepnyak's name were the details of a “Lily Boole,” better known by her full maiden name, “Ethel Lilian Boole.” She would become Michal's future wife.

With the nonstop misfortunes that plagued Michal along the way, it was a surprise that he had managed to arrive at London in one piece. The young man trekked westward and made a stop in Hamburg, where he hid out of sight in unlocked stables. The food in his satchel long gone, Michael

tightened his belt and lived off scraps. He eventually managed to sell his glasses and the costly, albeit muddy, coat off his back, and scored a 3rd class ticket on a fruit vessel destined for England, as well as some bread and herring. In early 1890, a dehydrated and malnourished Michal, who spoke not a lick of English, finally set foot on the London docks, and from there, he wasted no time in tracking down Stepnyak-Kravchinsky.

Under the advice of Richard Garnett, the "Keeper of Printed Books" at the British Museum, Michal began to dip his toes into antique book dealing. It appealed to him for a number of reasons; fluency in English was not a requirement, and the job allowed him to travel around the world and hunt down both rare and "lost" books, which he could then resell to literature enthusiasts back in London for a princely price. These lost books, especially those that predate the 16th century, are collectively referred to as "*incunabula*"

In 1898, Michal entered a business partnership with Charles Edgell, another ambitious Cambridge graduate, and together, the pair co-published their first catalogue. His first catalogue being a smashing success, the enterprising Michal, having caught his golden goose, opened his first bookstore at 1 Soho Square two years later. That same year, he debuted his second catalogue, one that was greeted with even more praise than the first. Many in the area credited him with sparking a new trend that saw Londoners elbowing each other out of the way to get their hands on these one-of-a-kind prints. In 1902, Michal and Ethel tied the knot, and by 1904, he had secured his British citizenship. From that point forward, he formally adopted the name of Wilfrid M. Voynich.

Voynich evolved from an up-and-coming talent to a force to be reckoned with, garnering a solid reputation for his unfailing intuition and an eye that seemed to land on the rarest of finds. His English improved immensely with time, and his arsenal of multilingual vocabulary duly expanded thanks to his globetrotting habits. Despite his successes, he stayed humble, and remained as such – at least in the beginning of his career. Said one of his employees at the bookshop, "He spoke 18 languages, all, he told us, equally badly."

In time, Voynich's ambitions swelled, to the point that he overlooked his principles in the name of business. In Italy, one of his favorite places to mine

for literary gold, he purchased reams upon reams of old manuscripts from religious establishments. He later admitted that during one of his buying sprees, which took him to a homely convent in rural Italy, he managed to convince the monks that their library was filled with outdated books and "dusty rubbish." In fact, the convent was unwittingly sitting upon a trove of early printed books and codices worth hundreds of thousands of *liras* . In less than a month, Voynich had made off with the convent's *incunabula* , gifting them in return with – in his own words – boxes of "modern garbage." Another stopover in Corsica saw him practically robbing its local convent of up to 600 prints.

It was in 1912 that Voynich happened upon the greatest and most defining find of his career. When he heard the news that the Jesuit-owned Villa Mondragone was liquidating its assets, he journeyed to the Italian town of Frascati to take a gander at the situation himself. As he dusted off the 300-plus covers littering the library tables and floors, handling these precious volumes with extra care, a strange chest in the corner of the room caught his attention. He crept over to the chest, unlatched its rusty lock, and as soon as he prised it open, his eyes laid feast upon a collection of unmarked books. From this chest, Voynich selected another 30 prints to add to his ever-growing collection.

Among these prints was a rather unsightly, loosely-bound stack of papers that he would have glossed over had it not been for its vibrantly colored illustrations and the notes scribbled onto its margins, which clued him into the text's antiquity and potential worth. That said, he thanked his lucky stars later when he returned to his bookshop and examined the manuscript with proper equipment, for it was only then that it occurred to him that he had found his holy grail. An excerpt from Voynich's diary that night hinted at his glee: "It was such an ugly duckling compared with the other manuscripts, with their rich decorations and golden colors...My interest was aroused at once...[when] I found that it was written entirely in cipher."

A page from the manuscript

Skimming the Manuscript

“Well, certainly the Voynich Manuscript is the 'limit text' of Western occultism. No one can read it. It is truly an occult book.” – Terrence McKenna, 20 th century American ethnobotanist

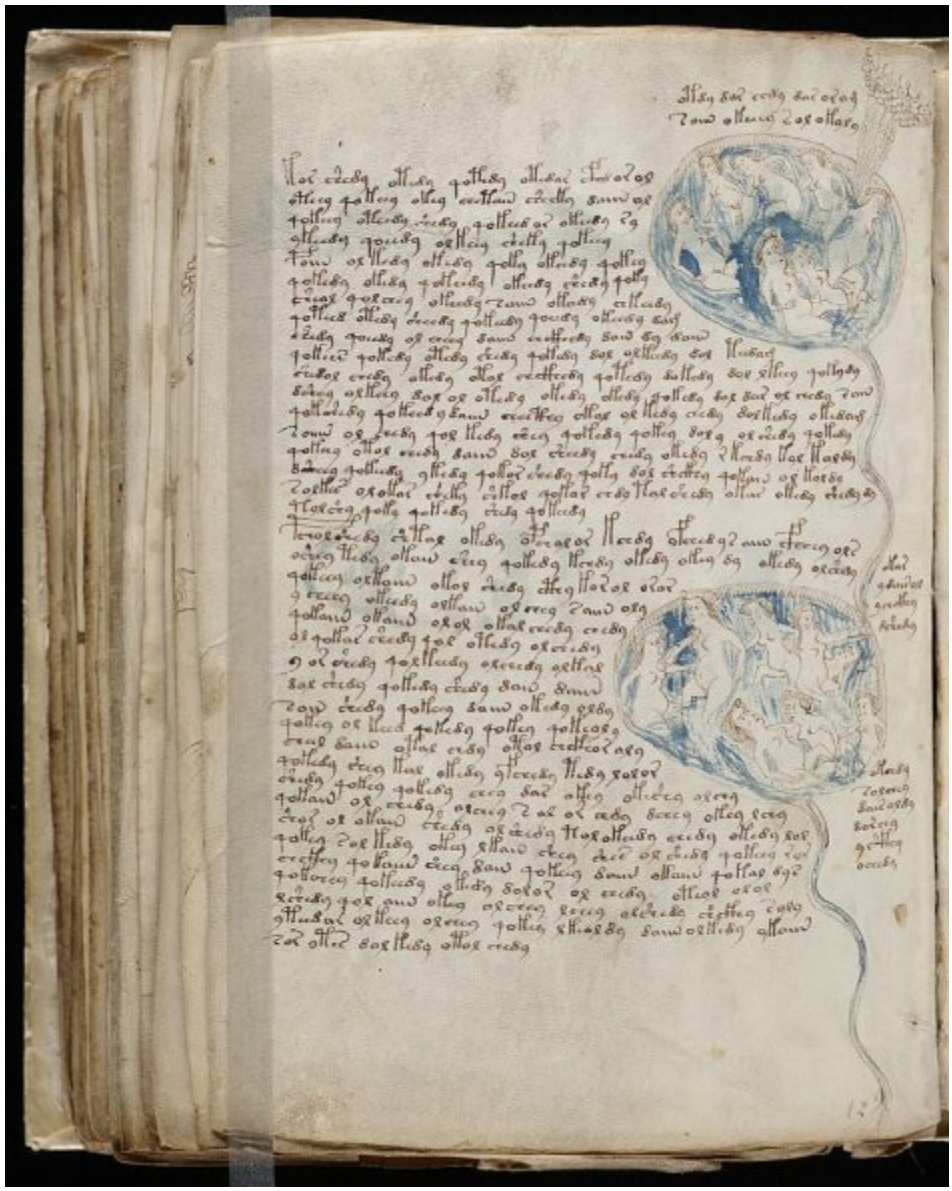
According to the accounts of E. Millicent Sowerby, one of the clerks employed shortly after the purchasing of the manuscript, the bookshop was often flooded with suspicious people Voynich flagged as “spies.” These spies, posing as customers, would often pop into the bookshop, and while they were friendly enough when approached, they never actually bought

anything. Instead, they lingered on the sidelines as if casing the joint, their eyes seemingly glued to Voynich's every move. At first, Sowerby chalked them up to be no more than overeager entrepreneurs hoping to bridge a business relationship with the popular book dealer, but when the standoffish strangers continued to show their deadpan faces, his alarm bells were tripped. Could these men be spies employed by Voynich's covetous competition, or could they be looking for something in particular, something that they were certain had found its way into Voynich's hands? If the latter was the case, what was so desirable about this curious codex?

The codex in question measured approximately 8.9 x 6.3 inches, and it was entirely fashioned out of vellum (parchment made from calf or goat skin), from its book cover to its 240 pages, of which only 116 have been numbered. Its contents were split by later owners into 6 chapters –horticultural, astronomical, cosmological, biological/balneological, pharmaceutical, and recipes. The fragile vellum cover, barely hanging onto its hinges when it reached Voynich, is now known to date back to at least the 18 th or early 19 th century, and is presumed to have been replaced by its previous Jesuit owners, for covers of a similar style were often found in Roman Jesuit libraries. As the unmarked cover showed no title or author, it was later christened after the man who discovered it, and today it remains known as the Voynich Manuscript.

The most overt and distinguishing feature of this manuscript, of course, is the elegantly calligraphic but entirely inscrutable text every last passage was penned in. Experts have since concluded that the smattering of Latin writing found squeezed into its margins were added at a later date by one of its owners. Though there appears to be no punctuation separating its 170,000 glyphs – not ones found in any language, anyway –the passages were broken up into short paragraphs, and following Western traditions, appeared to have been written from left to right, line by line. With that in mind, some theorize that a weird "word" composed of what looks to be a figure 8, followed by a short scrawl with a curlicue, might be the author's way of indicating a pause for breath. Most bewildering of all was the fact that there was not a single erasure mark or no overlapping glyphs to be seen, which either meant that the author had been extremely careful in its execution, or that he, she, or they had pounded out the text in one long, "supernatural" trance.

Another hallmark of the manuscript was its rainbow of sketches and painted illustrations of varying sizes, some so small one had to squint to see them and others so large they took up entire pages, and even a few foldouts. These illustrations, many of which seemed to leap right out of the page by its sheer outlandishness, appeared to be of some sort of medieval or scientific reference book at first glance. At second glance, one might become puzzled by the stark contrast between these drawings. Full-color illustrations seemed to have been executed with exquisite finesse found only in the most talented of medieval artists, but they were interspersed with what can only be described as sloppy and crude sketches, some partially, and others completely uncolored. The illustrations of the second variety, apart from appearing like hasty afterthoughts, were almost childlike, almost as if they were drawn by a different hand.



Pages from the manuscript with illustrations of various sizes

While there have been plenty of theories, there are no definitive conclusions as to who the author – or at least the illustrator – behind this manuscript was. That said, the paint ingredients, as well as its color palette, have provided some clues that have allowed speculators to assemble a vague profile. In 15 th century Europe, one of the most popular timeframes linked to the manuscript's originator, colored inks were a luxury. Creating these pigments was a “technical challenge” and a science in its own right, one that required years of knowledge and expertise. Larger crystals and minerals often produced the most vivid hues, but whipping them up was a taxing task, as their denseness and rough textures made it difficult to pulverize and apply them onto canvases. Renaissance artists embraced a new spectrum of colors with the new materials made available to them, using azurite, ultramarine, and indigo to create stunning shades of blue, and radiant tints of green from malachite, verdigris, and green earth. Browns, blacks, whites, and other neutral colors were used mostly by the middle and lower echelons of society, for they were made from easily sourced materials, such as umber, bone char (crushed animal bones), and gypsum rocks, respectively.

The colors used in the manuscript, particularly in the horticultural chapter, included bursts of brown, green, blue, and splashes of red and yellow, but these colors were considerably duller than costlier paints of the time. It is for

these reasons that some have theorized that the author had come from a working class background with limited finances, for the manuscript relied mostly on browns and greens to spice up the illustrations. At the same time, the paint in the manuscript – sloppy sketches aside – was smooth and evenly applied, to such a degree that even over time, the obedient color, though faintly faded, has stayed within the lines.

The horticultural chapter of the manuscript is the longest of all the sections, consisting of 126 hand-drawn illustrations crammed into 130 pages. Though the text appeared to be no more than glorified gibberish, anyone who came upon it would be able to identify that the manuscript's horticultural section, as its name suggests, was chock-full of plants and herbs. Anything else would be pure conjecture.

While these drawings bore all the characteristics of a traditional plant, the majority of them – a theme that persists throughout the codex – shared similar qualities with known plant varieties, even as the illustrations were unique enough that botanists have found it almost impossible to label them. Now, if these plants did in fact exist at some point in time, this, some believe, could mean that these plants were only divulged to the manuscript's author, perhaps by a higher entity.

The horticultural drawings appeared to have been illustrated before the text was added, for the author had meticulously written around their artwork, a custom practiced by many Renaissance artists. But unlike the artists of this era who often recycled their drawings, especially when it came to herbs and greenery, none of the illustrations in the manuscript has ever been found in any literature that preceded it, or vice versa. As distinctive as the manuscript's plants were, they were indefinable enough for speculators to start drawing parallels – some more tentative than others – between existing plants and these funny herbs. More importantly, by humoring these labels, one might be able to trace the author's origins, or at the very least, where his travels had taken him.

For example, on *Folio* 32R, there is a full-page illustration of an “upright plant” with multiple tiers of branches sparsely adorned with elliptical moss-green leaves. Each slender branch was crowned with white flowers reminiscent of fluffy popcorn kernels and dotted with beiges and indigo

blues. Some have pointed out the plant's resemblance to the *thunbergia grandiflora* , otherwise known as the “sky flower.” Predominantly found in India, these special plants featured a similar set-up of leaves of the same color, though they were heart-shaped rather than elliptical, as well as “clusters of light blue or white tubular flowers.”

If this plant truly was the sky flower, this would mean that the Italian author would have had to be well-traveled, which directly clashes with the theory of its originator hailing from a less fortunate background. Then again, this could mean that the author was a native of India, or that this plant, like many others in the codex, had only ever existed in their mind's eye. Nonetheless, the plant's connection to the sky flower has since been severed

by expert horticulturists, who were quick to point out that the Indian plant does not have the telltale stamens and pistols that protruded from their flowers in the manuscript's plant.

In recent years, others have come forward to propose that the manuscript bears ties to the Americas, and its codex format to 16 th century Mexico. Rexford Talbert and Arthur Tucker of Delaware State University compared the *xiuhamolli*, also known as the “soap plant,” found in the 1552 Codex Cruz Badianus (or “Aztec Herbal”) to another one of the Voynich plants. Both featured “broad, gray-to-whitish” caudices (thick, trunk-like stems of woody plants), bumpy bark, and toenail-like roots. The colleagues later explained the significance of their findings in a published journal: “The portrayals of both of these Mesoamerican species are so similar that they could have been drawn by the same artist or school of artists.”

Another Voynich plant, or so the colleagues say, bear a remarkable resemblance to the “viola tricolor of Eurasia,” a special type of 5-petaled flower with a violet, yellow, and white ombré found in North America. On top of 6 animals and 1 mineral, the duo went on to identify 37 more of the 303 unique flowers and greenery that graced the pages of the manuscript with origins from Texas, California, Nicaragua, and more.

In 1944, another respected botanist from the Catholic University of America named Hugh O'Neill made new waves when he claimed to have successfully classified the plant in *Folio F33V*. The peculiar plant, which featured spiky tubers; star-shaped leaves; and a flat, pale yellow disc of a “seed bed” enclosed by immaculately detailed “purple-black” petals edged with white, O'Neill insisted, was a sunflower. As this plant was only introduced to Europe following Columbus' voyages to North America, he hoped to narrow down the manuscript's date of origin to sometime in the 1500s. At the end of the day, O'Neill's theory, like the countless ones that were presented before and after it, was mere conjecture.

The astrological and cosmological chapters that followed were just as confusing and open to interpretation as their horticultural counterpart. The pages belonging to the astrological chapter comprise complicated illustrations with an image of the sun, moon, and uncanny constellations of stars in its center. Many of these centerpieces were accompanied by short texts, which seemed to be the author's labels for them.

The astronomical and cosmological chapters often overlap when discussed by cryptographers, but the 12 pages of zodiac-esque drawings are mostly categorized under the astrological chapter. The cosmological pages, on the other hand, feature elaborate circular designs. Many of these were wheels, some sliced up like slivers of triple-crusted pies, with star arrangements and

impenetrable symbols associated with the months of a Western calendar and zodiac, and wind patterns.

The most intriguing feature of the cosmological chapter was the 6-page foldout, which, when laid out to its fullest extent, showed 9 connecting circles, the largest of which was placed dead center of the page. These circles, which were embellished with geometric scales and other distinctive but complementary designs, had minimalistic sketches of castles peeking out from their sides. The circle in the center included an assemblage of 6 towers encircling a pool of stars, with onion-shaped domes and ornamental stems topped with clover-like pendants.

With the help of a magnifying glass, one would also be able to detect a minuscule, somewhat faded impression of a tower, which some believe shows evidence of a “transfer,” whereas others brush it off to be nothing more than a smudge. Whatever the case, it is known to the cryptographers as

the “Rosettes” page, and its inclusion of roughly drawn castles have led many to believe that the foldout was a map of some kind. Cryptographers and self-proclaimed Internet sleuths have since taken it upon themselves to label these circles with kingdoms they most likely represented. The central circle, for one, is said to hint at “Russia's Golden Circle,” and the peppermint swirl of a circle underneath it, decorated with blues and red polka dots, the “Black Sea.”

The zodiac chapter, another fascinating portion of the manuscript, features figures similar to those in medieval astrology, but upon closer inspection, they seem to chart the signs and constellations based on the beliefs of a different era, or as some would say, of a different world altogether. An average of 30 naked “nymphs” wielding “star-shaped flowers,” along with the crest of the zodiac sign it symbolized, were housed within the full-sized “concentric circles” of the manuscript's zodiac wheels. Observant cryptographers have picked up on the two types of ink in this chapter – the script scratched under the zodiac signs was not only written in darker ink, it had visibly come from a different hand. Moreover, unlike the traditional zodiac, the one exhibited in the manuscript did not start with Aries, but rather with Pisces. The zodiac wheels devoted to Capricorn and Aquarius have since fallen out of the manuscript, lost to the hands of time. And again, there are others who stand firm that these wheels, like the other missing pages of the manuscript, had been intentionally ripped out by those who were unwilling to allow another set of eyes on their contents, for they just might hold secrets far too great for human consumption.

The crest in the center of the Pisces wheel was that of a rather poorly drawn, uncolored fish with a pointed snout, and it was annotated with the word “Mars,” the French term for “March.” It is important to note that the “a” found in this script, which was a tad skewed, shares identical qualities to the As found in the other labels of the manuscript, indicating that all these labels were penned by the same author. It only made sense for the decoder to begin in the astrological section, for it bore the most obvious – and only – likenesses to the real world.

The Aries wheel, which was illustrated with only 15 nymphs, was centered by another discolored, menially detailed ram in gray. Behind it was a tree that

resembled a deformed hand and arm emerging from the grass behind it. Both were poorly colored with blotches of green. Some researchers have shined a light on the parallels between the manuscript's ram and the ram in the *Codex Schürstab,* a German “treatise on medical astrology” published in the 15 th century, the latter of which featured a somewhat similar background, but most have agreed that this generic resemblance is something of a stretch.

The ensuing wheel of the Taurus, which also came with 15 nymphs, show that the manuscript's author was inexperienced with the composition of animals and creatures in general. The bull, seen in the wheel's emblem, along with other of the manuscript's creatures, had awkward hind legs and were queerly proportioned, most of them with necks far too skinny to hold up a head of that size. Painted much more liberally in a striking brick red, the bull is seen lapping water from a bucket.

Another interesting twist to the manuscript's zodiac was its rendition of the Gemini. The twins of the Gemini wheel, unlike their conventional depictions, were portrayed as fraternal twins of the opposite sex. This is something one might consider mulling over, for there must have been a reason that the author had chosen to clothe the siblings – the male in a green tunic and a matching beret-like hat, and the lady in a dazzling indigo dress – amidst the sea of nude nymphs found strewn across the manuscript.

Yet another chin-scratching element of the astrological chapter are the 3 crowns worn by the central nymphs of the Cancer, Leo, and Libra wheels. All crowns are uncolored, save for the crown of the nymph of Leo, which is brightened with a dab of a royal red. Many of the zodiac nymphs also sport “tressed” up-dos and braided hairstyles; others believe that these squiggles are flower wreaths or crowns. But what truly places these zodiac wheels on another pedestal as compared to the other gripping illustrations in the manuscript is the author's alleged use of “primeval animation.” If these wheels were spun, they would create a spellbinding illusion of an endlessly parading line of naked nymphs, each wielding their star-flowers.

The next section, entitled the biological or balneological (referring to baths or water) chapter, is often spotlighted as the most “unusual” component of the manuscript. It is a buffet filled with wordy walls of text and punctuated

by scattered appearances of skinny-dipping nymphs – seemingly sisters to those in the astrological segment – and other odd characters, a serpentine network of pipes, communal bathing pools, and platforms made of clouds.

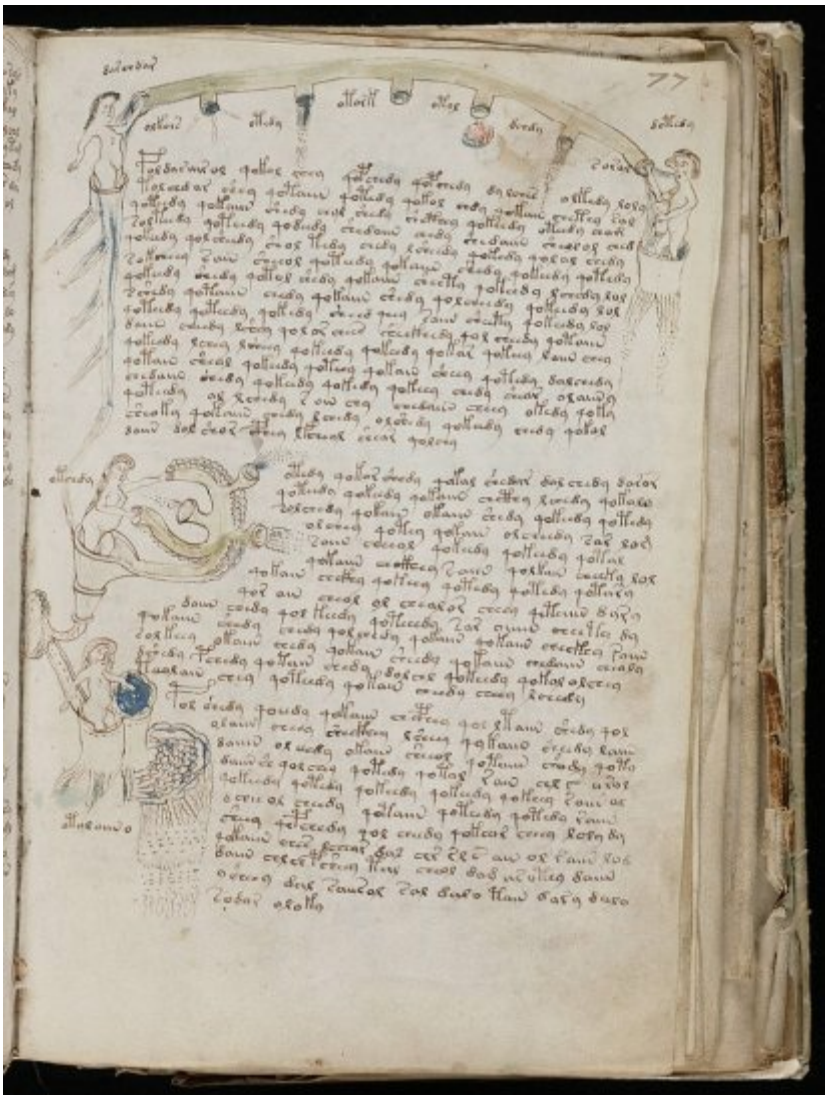
One of the pages in the biological chapter

Like every piece of the manuscript, no matter how big or small, cryptographers have extensively analyzed these extraordinary drawings, and as such, they have arrived at their own interpretations of the subject matter. Some claim that these drawings illustrate the shocking rituals performed in some ancient cult or secret society, but the majority of cryptographers are sold on the fact that they are likely more allegorical than they are literal. A few have found metaphors in this image related to “alchemical” and “natural” processes. Others choose to direct their focus to the drawings of the miniature

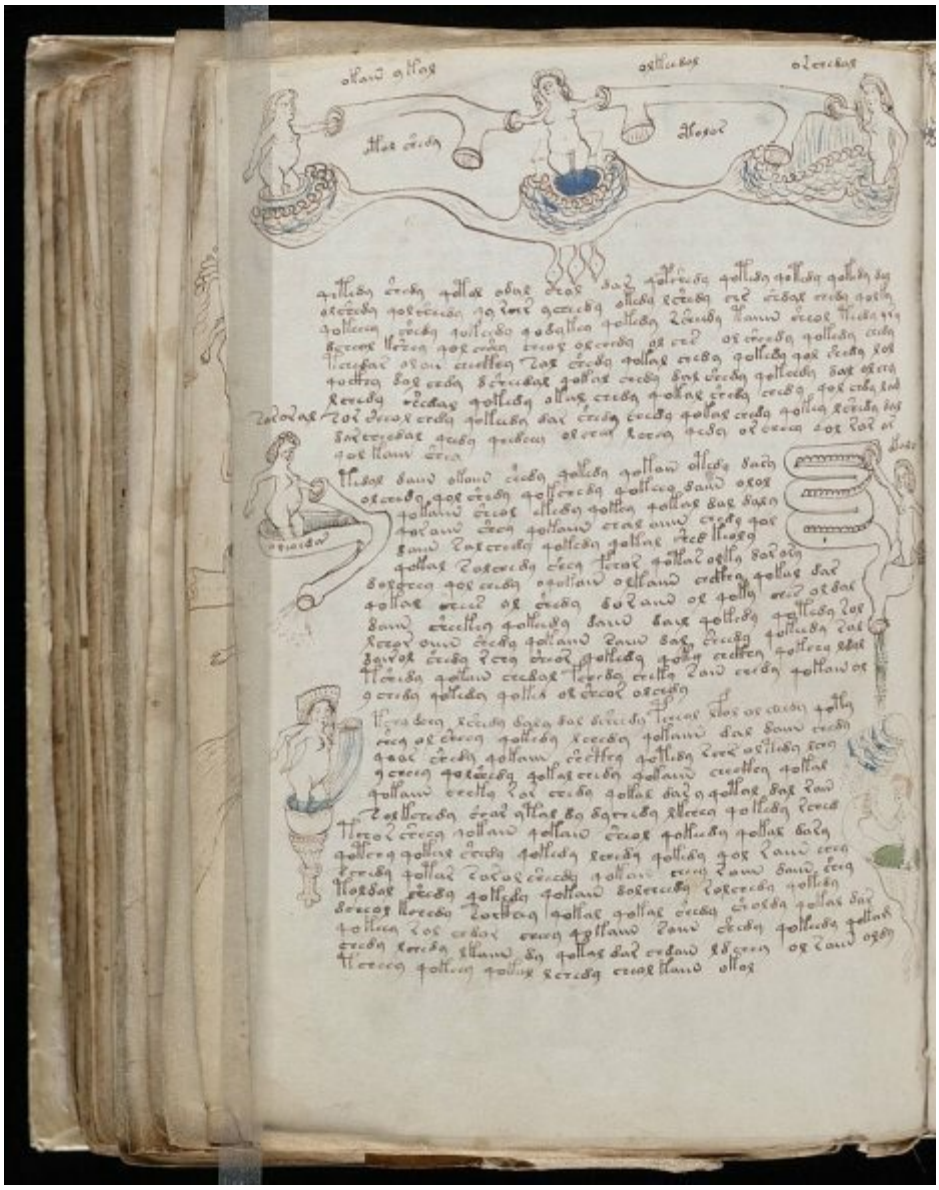
bathing nymphs wading in pools (pictured with healthy, rounded abdomens), interacting and posing with the strange tubes and capsules.

While some drew correlations between the manuscript's strange green baths and the pools of the *Balneis Puteolanis* – a 13 th century Roman poem that revolved around the medicinal advantages of spa waters – others are adamant that the manuscript harbored the secrets of the fountain of youth, more specifically, the *Der Jungbrunnen* . The oil painting, a masterpiece of the German Renaissance painter Lucas Cranach the Elder, showed a pool of comely young maidens splashing about in gray waters. To the right of the pool are a flock of maidens drying off. Next to them was a tent where the naked women entered, and from the other side of the blood-red curtains, exited, clothed and with child. However, as opposed to Cranach's maidens, who seemed to be replicas of the same woman, the manuscript's nymphs, while far less refined, were depicted with unique facial features and expressions. Their perky bosoms and lack of wrinkles, which many believe to be its connection to the fountain of youth, is most likely coincidental.

The most cogent of all these balneological-related theories often juxtaposes its images with bodily organs, its most glaring hint being the pipes, tubes, and capsules, which were drawn almost to resemble blood vessels and arteries. The tube-like borders running along the top and left sides of the *Folio 77R,* for instance, which is joined by a nymph showering with the water cascading onto her from the upper pipe, is said to resemble the aorta. The rest of the nymphs washing themselves with alien-like vessels alluded to one's heart and the “4 humors of Hippocratic medicine – yellow bile (fire), black bile (earth), phlegm (water) and blood (air).”



The nymphs enjoying themselves in the pipes that bordered *Folio 77V* – which included a maiden ankle-deep in her own pool of water, her arms outstretched and her hand stuffed into the pipe openings on either side of her – are said to symbolize the anatomy of the intestines and appendix.



A few of the nymphs in the biological section were also pictured with crowns, but only one of them is seen brandishing what appears to be a cross, or something similar to the cross-staff-hybrid that St. John the Baptist is depicted often carrying. This one cross was enough to trigger theories regarding hidden Christian symbolism, but these theorists are most likely reaching, for the manuscript not only bristled with astrology, cosmology, and other pagan phenomena, the cross seems to be the only recognizable token of the religion in the entire manuscript.

Last, but not least, are the pharmaceutical and recipes chapters, which make up the final pages of the evasive manuscript. In these chapters, one seems to

find a sequence of medicinal instructions that appear to cater to healing unknown maladies, as well as recipes for all sorts of baffling brews and puzzling potions. The botanical drawings and supplemental sketches packed in between the dizzying texts were seemingly meant to better explain the medicinal guide and healing formulas, but some are so bizarre that they accomplish the contrary.

The pharmaceutical chapter of the manuscript is encapsulated in 3 bifolios, which were single sheets folded twice to create 4 segments, all in foldout form. The right side of each segment was allotted to an assortment of roots, leaves, and petals, or “fragments” of medicinal plants, placed in neat rows of about 1 to 9 each, as well as the short stanzas of texts below them. The left half of the segment – which was really more a margin, for it only took up 1/5 th of each page – was set aside for about 3 to 4 so-called “containers,” amounting to 45 in total. Those who have studied the manuscript have wondered if this chapter of the codex has been left unfinished by the author, as a few labels appear to be missing from the fragments.

Though they resembled poorly proportioned wedding cakes and towers of bongo drums, most have deduced these containers to be flamboyant apothecary jars with multiple tiers. These containers, cryptographers suspect, are treens, a name referring to tiny trinkets and household objects chiseled out of timber. Likewise, the Voynich containers appear to also be “turned, carved,” and licked with a sheen of paint. These unusual receptacles were supposedly used to store herbal powders and medicinal drops.

Some have spotted a kinship between the Voynich jars and the apothecary vessels produced in medieval Europe. One such example are the apparatuses found in “page 99 verso,” a cylindrical pillar enhanced with red, orange, and blue colors and patterns. This has been likened to a vintage wooden sewing case from 19 th century France, a mechanism shaped like a pepper grinder which could be twisted open, so that one could store their needlework equipment in its velvet-lined chamber. Another brown Voynich jar, seen with a needle projecting from its bulbous head and drawn next to what appears to be the roots of a striped turnip, has been compared to the Austrian wooden *necessaire* , another sewing case. Other Voynich vessels are said to share similar aesthetics with Egyptian perfume bottles, and those with feet, to

herbal jars made in Norway.

Towards the end of the manuscript is the recipes chapter, which consisted of only passages separated by “tail-less” stars with 7 or 8 points, every other one of them marked with a red, yellow, and black dots in its center.

Apart from the ornamental rings, tiaras, spindles, flasks, cannabis leaves, and other real world paraphernalia spied by the decoders are the anomalous animals that appear in the manuscript. One of the quirkier creatures was the pint-sized, uncolored outline of a dragon in the horticultural chapter,

snacking on an enormous 16-sided leaf several times its size.

Other recognizable animals include birds, snakes, goat, frogs, and sheep. Then, there was the armadillo-type creature with a scaly, padded back and a long snout, which some believe to be a pangolin, typically found in Africa.

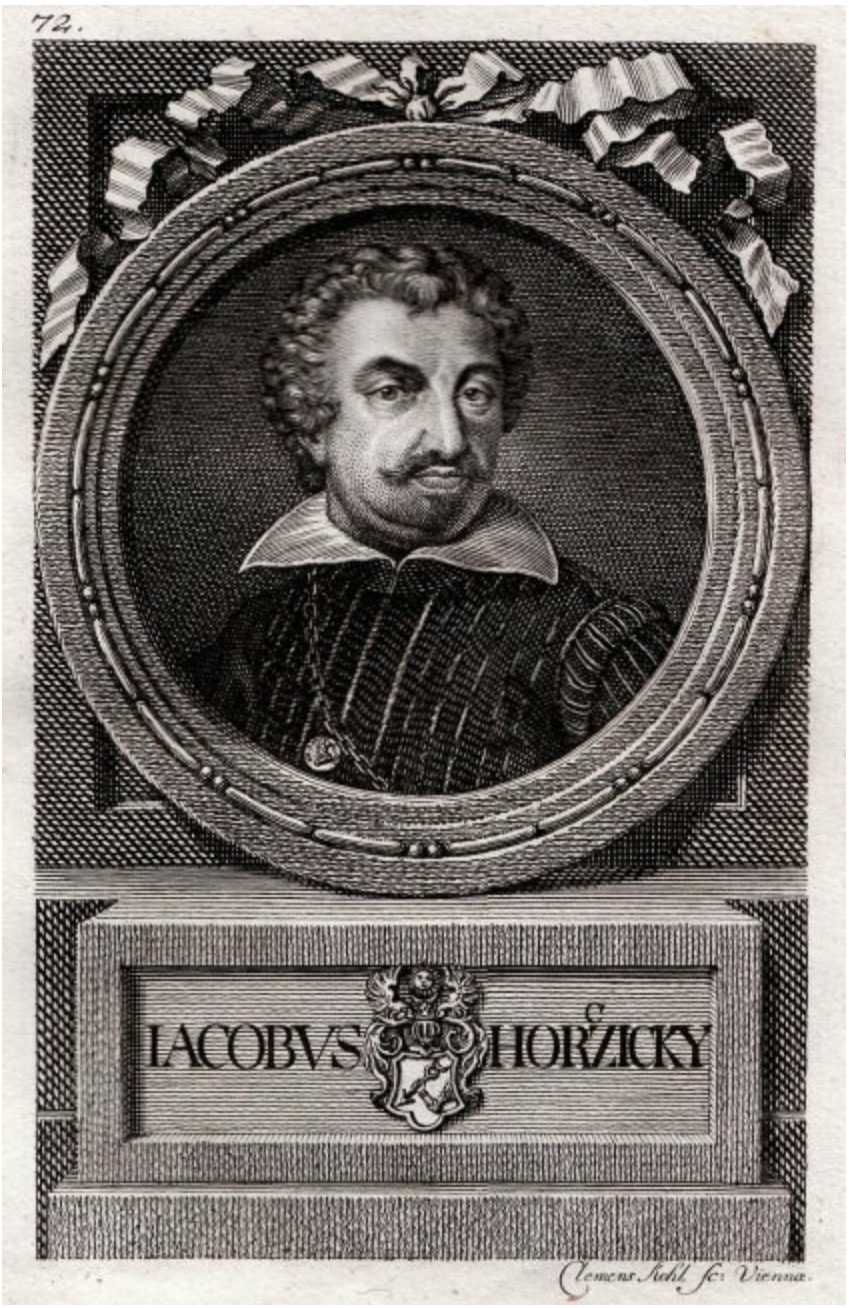
Once again, it must be stressed that the connections stated above are mere speculation. Still, even if any of these educated guesses had some weight to them, there remain numerous Voynich elements that can be bound by no label with any certainty.

Three Magi and a King

"Cut that in three, which Nature hath made one, then strengthen it, even by itself alone, wherewith then cut the powdered Sonne in twine, by length of time, and heal the wound again..." – *Testamentum Johannis Dee Philosophi*

Summi ad Johannem Gwynn

As the story goes, a few months after Voynich’s discovery of the manuscript, the pharmacist-turned-book dealer came across yet another happy accident. One day, when he was developing a set of photographs in the darkroom he had set up in the back of his bookshop, he knocked over a bottle of photo-developing chemical with his elbow. He promptly snatched up the manuscript on the desk, but the damage had already been done. Immediately, he reached for a dry cloth to mop up the mess he had made, but before he could scrub the liquid out of the corner of the manuscript's first page, his narrowing eyes landed on the delicate writing materializing before his very eyes. He blew gently on the damp spot and furiously fanned at it with his fingers until the 4 words crystallized. He mouthed the words over and over again, his ears ringing in his excitement – Jacobus de Tepenec - and underneath it, the shortened but revealing 4-letter abbreviation, “ *Prag.* ”



A depiction of Jacobus de Tepenec

Naturally, even the discovery of Tepenec's name comes in many a version. Some say that the splotch on the original copy was the product of a regrettable, but deliberate attempt on Voynich’s behalf, for he had noticed the name days before and had dabbed at it with special chemicals in the hopes of enhancing the letters. Others claim that he had been endeavoring to create a “photostatic reproduction” (a photocopy) of the manuscript for reviewing

purposes, but instead fished out a previously hidden name thanks to the underexposed plate.

Voynich was not the only one to have tampered with the manuscript. The horticultural chapter is particularly battered, its pages riddled with holes lined with browned edges. These burn marks are said to be the result of past cryptographers armed with lemon juice droppers, hoping to unearth secret messages written in invisible ink.

Regardless, Tepenec's name was enough to launch the manuscript's official record of ownership, allowing historians to track its journey. Following a round of research, Tepenec was bumped up to second on the list, his name swapped with that of Holy Roman Emperor Rudolf II. Rudolf II, later nicknamed “the Mad Alchemist” by his subjects, was academically gifted, and had a penchant for science, mathematics, literature, and alchemy. He was fluent in Spanish, French, German, Italian, Latin, as well as conversational Czech, which was perfect for entertaining foreign diplomats and monarchs at royal banquets and get-togethers.

Rudolf II

But as it is often touted, money does not buy everything. The emperor was a troubled soul and was prone to dark moods, spells of depression, and other mental illnesses, conditions that only seemed to deteriorate at a faster rate after his rise to power. In 1577, 25-year-old Rudolf suffered the first of a series of panic attacks and nervous breakdowns, eventually reaching such a low point that he could hardly get himself to step foot out of his castle.

By 1580, he was not much more than skin and bones, and he was in such a dreadful state that those around him began to fret over his life. Though he managed to gradually regain the weight he had lost, his rapidly plunging spirits were yet to be lifted. His paranoia left unchecked, he became convinced that a queue of assassins were coming for him. He trusted no one, especially not his relatives, whose hands he believed itched for his crown.

His gold and treasure chests were kept padlocked and by his bedside at all times. When he started to have reservations about his staff, he even emptied out the castle pantries to teach them a lesson.

For the sake of his health, in 1583, Rudolf elected to remove himself from all the instability in Vienna and set up permanent residence in Prague's Bohemia. To distract himself from his erratic emotions, he kept himself holed up in the castle library for hours on end, studying astronomical, alchemical, and paranormal literature from cover to cover. He started a collection of occult paraphernalia, purchasing exclusive artifacts and texts, many of which were sold to him as the only one of their kinds. He shooed away his diplomatic and governmental officials, and instead, he would only surround himself with an esteemed circle of astronomers, artists, craftsmen, antiquarians, and scholars from around the world.

Rudolf paid no mind to the disorderly political affairs, and allowed the commotion to simmer dangerously in the background. To the emperor, the countless untapped avenues left to explore in the promising crafts of alchemy and “scientific” magic deserved far more attention.

Unsurprisingly, the emperor's zeal for unconventional sciences attracted just as many – if not more – quacks and fraudsters as it did scholars with glowing credentials, the second of which included the acclaimed German astrologer Johannes Kepler.

It was during this period of the emperor's heightened obsession with strange sciences, estimated to be sometime between 1600 to 1610, that Rudolf purchased the Voynich Manuscript from an unknown seller for a whopping sum of 600 ducats (roughly $86,250 today) His officials were severely disappointed by Rudolf's impulsive and extravagant purchase, one that had most likely been looted from an undisclosed location in Italy, and when they realized that the emperor had purchased a book that no one could read, the color in their complexions no doubt drained faster.

But who was this Jacobus de Tepenec, and how did the manuscript end up in his possession? Jacobus, a Moravian native born “Jakub Hořčický,” grew up in a blue-collar family. With the family barely getting by, he took up a job as a kitchen aide at a Jesuit-run academy in Krumlov, though he would not

receive the privilege of a formal education until he was accepted at the Krumlov Seminary, a school for impoverished children, at the age of 15. Starting that year, in 1590, the diligent lad took up another part-time job as an assistant in the college pharmacy. He studiously shadowed his boss, the Bohemian apothecary, Dr. Martin Schaffner, and developed a passion in the trade.

When he graduated from the *gimnazjum*, he acquired a license and began practicing the trade himself, subsisting on a small but decent living for several years. By 1598, Jacobus, who hoped to broaden his knowledge on his chosen livelihood, moved to Prague and returned to school, where he became a student of Aristotelian philosophy. In addition to his studies, Jacobus juggled both chemical and pharmaceutical work on the side.

As soon as he could afford it, Jacobus rented out a warehouse in Schimov, a village neighboring Prague, and converted it to a laboratory that he could call his own. Here, he planted and harvested his own herb garden, and he experimented with an array of alcohol infused with herbs, eventually launching his own line of healing brews and restorative elixirs. With the help of some tip-top marketing, his bottles began to fly off the shelves, sometimes faster than he could replenish them.

His bestseller was the *Aqua Sinapis* (derived from his Latin surname, Sinapius), which was prepared by distilling a clear type of alcohol and injecting it with mustard seed extracts. Apart from his skillful salesmanship, Jacobus impressed local scholars by developing a method to “transfer the scent of flowers” to liquid form, supposedly cooking up the first batches of modern-day perfumes.

Owing to his newfound wealth, he began to rub shoulders with high-ranking officials in the political sphere, and in time, he became acquainted with Emperor Rudolf II. He helped finance many of Rudolf's alchemical projects and relieved many of his debts. For this, he was later rewarded an estate in the town of Melnik.

In 1607, Jacobus was appointed the “Imperial Chemist” of Rudolf's court, though he would also go by the title of “Chief Botanist” and “Imperial Distiller,” among many others. The following year, Jacobus was summoned

to Rudolf's castle. The emperor, who was suffering from another debilitating bout of depression, refused to seek traditional help, and instead hired the pharmaceutical/botanical expert as his personal psychiatrist. Thus, Jacobus started him on a strict regimen of *Aqua Sinapus*, other herbal extracts, and special teas, which supposedly did wonders. To square his accounts with Jacobus, Rudolf ennobled him that year, granting him the title “de Tepenec” and thrusting in his direction a mountain of gifts, among them the irreplaceable Voynich Manuscript. Shortly after receiving the codex, Jacobus – who, like many others, was discombobulated by it but understood its value – cracked open the book and wrote his name on the upper corner of the first page.

Other cryptographers are positive that Rudolf, a fanatic of the unknown, would have never surrendered the manuscript, either of his own accord or by force, especially considering the gold he had to shell out for it. Rather, they believe that the emperor had only temporarily entrusted it with Jacobus and asked him to decode its text. Perhaps it was even the emperor himself who had instructed Jacobus to write his name on the manuscript, so that if it were to be misplaced, it might find its way back to him.

This begs another question: why would the emperor employ only one cryptographer to the task, rather than pass it around so that it could be scrutinized by multiple people? Some say that Rudolf had a hunch that the manuscript's nonsensical language concealed alchemical and supernatural secrets. Given the hostile climate at the time, which was fueled by the Christian persecution of heretics and “devil-worshiping sorcerers,” these were the very sciences that the Church worked tirelessly to extinguish, meaning that Rudolf would have felt compelled to keep the attempts at deciphering secret.

Historians today are almost certain that the manuscript was in anything but mint condition by the time it had arrived in Rudolf's possession. Alas, any clues that might lead to its author have either only resulted in frustrating dead ends, or even more open-ended questions and brittle postulations. Was the manuscript really a treasure from a faraway land, or could this be the brainchild of conniving, calculating crooks?

Though it would have been better to keep his fascination with the occult

under wraps, word about Rudolf's staggering private collection spread, particularly among merchant and trader circles. On top of that, the emperor was not much of a haggler, and he was known to drop a pretty penny for anything that piqued his interest at any given time. As a result, charlatans teemed into the castle, peddling their pointless potions, counterfeit artifacts, and maybe even a meaningless manuscript written entirely in random squiggles, one so tantalizing that it has managed to fool millions over the years.

Atop this list of suspects was a notorious duo of self-proclaimed alchemists, sorcerers, and psychics by the names of Sir Edward Kelley and John Dee. Before Kelley dove head first into the paranormal world, he was employed as a scribe in his hometown of Worcester, England. He spent years holding down the same post until he was abruptly fired for forging official documents. Rumor has it that one of his ears was sliced off for his crimes, which he kept hidden from future clients with a range of wigs, long hairstyles, and oversized hats.

Kelley

Bitter from the humiliating dismissal and left with nowhere else left to turn, Kelley reinvented himself into a spirit medium and occult specialist seemingly overnight. Kelley might have needed to exert some effort when it

came to learning how to talk the talk, but if there was one thing that he was born with, it was his smooth-talking and artfully crafty ways, which allowed him to round up a fresh audience in no time. In 1582, Kelley befriended a bright and entrepreneurial mathematician named John Dee. Dee, who was despairingly searching for a medium or a crystal-gazer who could speak to the angels, was ecstatic when Kelley told him that he had found his man. Kelley evidently won him over after just one session, for he became Dee's personal scryer not long after that. Between the years of 1582 and 1589, the "blessed" duo performed hundreds of séances, spiritual readings, and "prayers for enlightenment" up and down the country.

Kelley may not have been the real deal, but if there is one thing that cannot be denied, it was that he was as shrewd a businessman as he was an innovative mind. More importantly, he knew exactly how to keep an audience. During a trip to Wales, just a year into his partnership with Dee, Kelley managed to get his hands on the world's only copy of *The Book of Saint Dunstan* , an alchemical manuscript that supposedly taught one how to convert special red and white powders to metals. A few weeks later, Kelley presented Dee with "2 ivory caskets" filled with samples of powders, which he had supposedly been ushered to by a "spiritual creature." He then spent the next few days in the makeshift laboratory he had installed in his kitchen, later reappearing with 3 glittering golden nuggets, which he handed out to Dee and two other giddy clients. Dee, who became restless with glee at Kelley's "proven" skill, immediately proposed that they take their act on the road.

In September of 1583, Kelley and Dee arrived in Prague, where they leaped at the opportunity to advertise their services to the emperor. By now, Rudolf's advisers would have had plenty of experience with the legions of quacks and fraudsters coming in and out of the castle doors, and as such, they were wary of the pair's intentions. Several attempts were made to warn the emperor, only for every last one of them to be rebuffed. Rudolf readily accepted their request for an audition. That same day, Kelley was escorted to a small, windowless room in the cellar, and left to his own devices – or so he thought. In reality, Rudolf was observing his every move from a secret peephole in the wall. Kelley proceeded to put on a sensational show, generating puffs of colored smoke and bursts of fire. When Rudolf "returned" a few hours later, a

beaming Kelley dropped a chubby chunk of gold onto the palm of the bug-eyed emperor's hand.

Most agree that Kelley had been aware of the peephole all along and had simply produced some gold he had smuggled into his pocket beforehand. This was one of the oldest tricks in the book, but the emperor fell for it. The same naysayers deem Enochian, the angel language Kelley was allegedly fluent in, to be purely fictitious, and the pair to be no more than professional con artists. That said, when it comes to whether or not Dee was a gullible victim or a willing accomplice to the equation, opinions are split down the middle. Those who maintain Dee's innocence often take Kelley's aptitude for deceit into consideration. Kelley is said to have been so persuasive that Dee agreed when the angels demanded they swap wives.

Dee

Quite a few chroniclers now believe that it might have been this same duo that authored the Voynich Manuscript in pursuit of a big payday. Some say that apart from Jacobus, Kelley had been invited to decode the manuscript, and like a man who knows no failure, he succeeded in “deciphering” a portion of the text via angelic séance. Kelley's hand hovered over the

manuscript as he peered intently into his crystal ball, and he relayed the angelic messages through an Ouija board of his creation as Rudolf lapped up every second of it.

If the Voynich Manuscript was in fact, a hoax, Kelley and Dee seem to fit the profile and timeline to a tee. Be that as it may, if Rudolf had acquired the manuscript, at the earliest, in 1600, Kelley could not have been the one to have sold it to him, for he died in 1597. Of course, this could simply mean that Dee, who lived until 1608, had been charged with delivering it to the emperor, and the profits might then have been divvied up between his and Kelley's remaining loved ones.

On the other hand, some scholars insist that the Voynich Manuscript had not been conceived out of greed but out of necessity. Australian author Dr. Stephen Skinner, for one, is confident that the manuscript was authored by a frantic Italian Jew who was looking for a safe way to impart cultural secrets and wisdom during the height of the Christian persecution. This might also explain why the Voynich plants teeter between fantasy and reality; the author hoped that the plants would still be recognizable enough for the right readers, while still maintaining the power to stupefy when in the wrong hands. Skinner supports his theory with another distinctive feature of the manuscript – the naked nymphs in the green baths, which he has compared to the 2,000-year-old public baths the Jewish people called the " *mikvah."* The *mikvah* , which are sometimes still used in Orthodox Judaism, were designed to "purify" women following menstruation or childbirth. He drove his point home by pointing out that there were no men in these baths, and he also highlighted the nymphs' bloated bellies and the codex's lack of Catholic symbolism. "There are no saints or crosses," said Skinner. "– not even in the cosmological sections."

As believable as Skinner's theory might be, it is only fair to keep in mind that while the Jews were targeted during the worst years of the Inquisition, Jewish doctors were highly sought after for their invaluable knowledge of Mediterranean botany. Given that more than half of the manuscript was dedicated to horticulture, the author was most likely a Jewish physician, or at the very least an herbalist. Many of these Jewish doctors also had backgrounds in astrology, for a consultation with the stars was needed to

“determine the nature of an illness and treatment.” Considering the supposed protection and comfortable lifestyle that Jewish doctors were guaranteed, few would have risked their necks for such a risky endeavor. Hitching on this same train of thought, others may argue that all it took was for one brave soul to go above and beyond to ensure that their legacy would be forever protected.

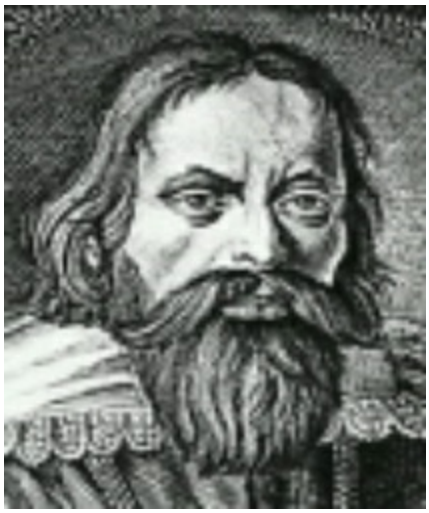
Voynich’s Unraveling

“There is another alchemy, operative and practical, which teaches how to make the noble metals and colors and many other things better and more abundantly by art than they are made in nature.” – attributed to Roger Bacon, 13 th century English philosopher, friar, and alleged alchemist

About a decade ago, as manuscript aficionado René Zandbergen was browsing the Voynich archives, he made a pivotal rediscovery in the form of a certain letter dating back to the 17 th century. This very letter would identify who the manuscript ended up with after Jacobus de Tepenec's death: an alchemist from Prague by the name of Georg Baresch.

In accordance with the running theme that seems to surround almost all of the characters known to have been associated with the manuscript, not much is known about Baresch. He grew up in the Praguian countryside, and despite his family's financial hardships, he enrolled himself in a Jesuit college, eventually earning both bachelor's and master's degrees in liberal arts and philosophy. In late April 1605, Baresch returned to Prague following a separate educational pursuit in Rome.

By 1625 – possibly earlier – he befriended Johannes Marcus Marci, a Bohemian scientist, rector of the University of Prague, and official physician to the Holy Roman Emperor. The pair shared a fondness for all things philosophy, so the chemistry was instantaneous between them. 14 years later, Baresch journeyed to Rome for a business trip, where he met Athansius Kircher, a German Jesuit ecclesiastical scholar and polymath who dabbled in cryptography on the side. They, too, would enter a lifelong friendship, and kept in touch through a series of letters they religiously exchanged for the next 25 years.



Marci

In 1630, Baresch inherited the Voynich Manuscript from Jacobus's estate, but the details of this transaction remain murky to this day. For the next two decades that followed, he immersed himself in the manuscript, laboriously tackling the cipher from all sorts of angles, all to no avail. Baresch, who had worked himself to near tears for 20 years with nothing to show for it, had arrived at his wit's end. Finding himself backed into a corner, he appealed to his pal, Kircher, for aid. If anyone could decipher the cryptic text, it would be Kircher, for he had become something of a celebrity in the field after he successfully decoded a wall of ancient Egyptian hieroglyphics that had escaped comprehension for years. Historians would later expose Kircher's hieroglyphic decryption to be almost entirely inaccurate, but at this juncture, Baresch had complete faith in him.

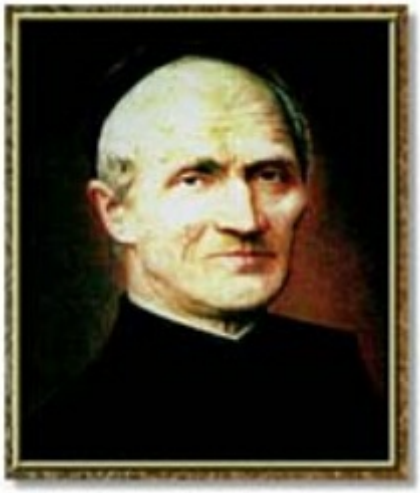
Baresch sent his first letter sometime in late February 1639, and in it, he expressed his exasperation with the “impossible” manuscript, writing: “There is in my library, uselessly taking up my space, a certain riddle of the Sphinx.” He described the texts and illustrations to the best of his abilities but could do them little justice. All he could deduce was that the manuscript seemed to be a botanical guide or herbal reference book, and he pined for his friend's expert opinion.

Kircher, who was always on board for a new challenge, was captivated by the idea of the manuscript immediately. In his response, Kircher attempted to coax Baresch into handing over the codex, but Baresch, who saw right

through him, sternly rejected the proposition. The letter Baresch sent to Kircher informing him of this is said to have been laced with a caustic, and somewhat “patronizing” tone.

Baresch ultimately chose to bequeath the manuscript to his other old friend, Marci, and upon Baresch's death, Marci took possession of it. Marci was also just as qualified for the task. Baresch knew him to be a reputable man of science and logic, with conviction and resolve so unyielding that he was once labeled a blasphemer for promoting “the science of conception and the development of the human embryo.” Marci would later make mention of his friend's fixation on solving the cipher. “To its deciphering he devoted unflagging toil,” Marci wrote. “as it is apparent from attempts of his...and he relinquished hope only with his life.”

Marci ultimately failed as well, as he could not make heads or tails of the mystifying manuscript. Thus, in 1666, Marci parceled up the codex and mailed it to Kircher, hoping that he would have better luck with it. Lamentably, the traceable history of the Voynich Manuscript stops at that point. No one knows if Kircher ever salvaged his stained reputation in the world of cryptography, and it is now generally assumed that it remained in the possession of the Jesuits for close to 300 years. During the Church's suppression of the Society of Jesus, a period rife with tyranny and conflict that lasted from 1750-1773, the manuscript is believed to have been relocated to the personal library of Peter Beckx. Beckx, who was Superior General of the order at the time, though aware of its potentially heretical contents, recognized its value, so he agreed to keep it safe from the sticky hands of the papacy. His *ex libris* , which was a customized bookplate, was found stamped onto the Voynich Manuscript when Voynich purchased it in 1912.



Beckx

When Voynich peeled back the cover of the codex for the first time, a few yellowed slips of parchment, which had been wedged into the manuscript, fluttered to the ground. This letter, which was the same one that Zandbergen would chance upon close to a century later, was dated August 19, 1666, addressed to Athanasius Kircher, and signed by Johannes Marcus Merci. Not only would this letter provide more insight behind the manuscript's previous owners, it contained the name of its alleged author: Roger Bacon.

Voynich decided to embark on a quest for a much-needed decoding partner, and he soon found one in William Romaine Newbold, an instructor of “intellectual and moral philosophy” at the University of Pennsylvania. Newbold was more than just a cultured and well-educated university professor renowned in the world of American academia, he was a known pundit of the supernatural. He had even churned out plenty of literature on the subject, including two articles regarding the fabled “Great Chalice of Antioch” – a silver bowl, stubby-stemmed bowl decorated with gilded carvings, the same Holy Grail that Christ had supposedly used during the Last Supper.

Newbold

It did not take much for Voynich to convince Newbold of Roger Bacon's instrumental role in the manuscript. The letter was proof enough, and the pair rejoiced at seemingly determining one of the most critical pieces of the Voynich puzzle: the hand that wrote it. Roger Bacon, an English Franciscan friar, scientist, mathematician, and philosopher from the 13 th century, was an interesting character. Though he was a devout Christian, Bacon was an advocate of "natural magic." He vehemently condemned magical incantations, spell-casting, and the "invocation of spirits," but he believed in the transmutation of matter and other phenomenon of the like, which he argued could only be achieved through mathematical and scientific experimentation. He received hundreds of clients at his clinics in secret – many of them nobility – and amazed them with his potent potions, which included an elixir that supposedly extended human life.

Given Bacon's social position and Franciscan ties, he had a plethora of manuscripts and texts at his disposal, and he used these to expand his horizons. Eventually, his appearances at the library became increasingly scarce. Instead, he spent his time traveling the world, interacting with new

cultures and learning their languages and customs. When he was not on the road, he was busying himself in his clinic with some novel experiment, and continued to push new potions to the public.

It would not be long before the Church learned of the friar's side business. After a thorough reprimanding and a threat of banishment, Bacon, much like the Italian Jew theory, was forced to go undercover to dodge the Clergy's probing eyes. It was at this point that Bacon supposedly put pen to paper, hoping to immortalize his “blasphemous” teachings with the greatest cipher the world has ever known. Voynich would later gush over Bacon in his writings, calling him an “infinitely great scholar, [one who] inferred in his words the necessity of hiding his great secrets in the cipher.”

The more they discussed the matter, the more Voynich and Newbold were reassured about Bacon's authorship of the manuscript – so much so, that they were, in a sense, willing to wager their lives on it. The pair are said to have driven themselves to near insanity over the next decade, their eyes locked to the inscrutable passages for so long that they turned red and watery. Newbold, in particular, began to pick up on a string of clues, of which multiplied the longer he absorbed himself in the unintelligible text. He found the “spiral nebuli” of the cosmos, along with allusions to human sperm, fertilized eggs, and Fallopian tubes. But to Newbold, what really clinched the deal – and later led to his undoing – was the curious and convoluted case of the “micro-letters.” The system he supposedly stumbled upon, which he claimed had been devised by Bacon, was known as the “anagrammed micrographic shorthand.” Plainly put, Newbold claimed that the microscopic “squiggles” seen protruding from the letters of the manuscript's text contained hidden messages that could be unveiled through a series of anagrams. To create these nano-sized squiggles, or “shorthand symbols,” Newbold further claimed, Bacon had invented a “usable compound microscope.” Likewise, to map out the stars found in the manuscript's cosmological chapter, an undeveloped science in his time, he assembled his own version of a telescope to observe the skies. Newbold became so obsessed with this one aspect of the manuscript's decryption that, according to *The New Yorker,* he squandered his last years and decaying vision with a magnifying glass clutched in his hand.

At first, Voynich and Newbold were applauded for their groundbreaking findings, and this particular theory was warmly received by scholars from various backgrounds. “It would cause such a sensation,” Voynich predicted, before going on to recount his discussions with his partner. “I wish you could see the excitement on the professor and his wife. They danced and embraced each other and me. They became ill, delirious!”

The partners slapped a new title onto the codex – *The Roger Bacon Cipher Manuscript* – and released it on the market, tagging it for a sum of $100,000. This was followed by an “Anglo-centric provenance,” which was a record of ownership, in which they proclaimed that it was none other than John Dee who had sold the manuscript to the emperor. The newspapers had a field day with the find of the century – or as some would insist, the millennium – but even then, there was not a single nibble.

It all came crashing down when historians, who began by deconstructing and questioning the timeline of the provenance, disproved all of Newbold's claims. They determined that the shorthand symbols were nothing more than pigment smudges and cracking paint, which only came naturally with age. The hole Newbold had dug himself in only deepened when he admitted that his methods of analysis had been “inconsistent.”

One of the first ex-endorsers to turn on Newbold was John Matthews Manly, a “chief cryptologist” whose services were heavily relied upon by the U.S. Army during the First World War. Manly later issued a statement retracting his support and criticizing Newbold for making a mountain out of a molehill, in which he explained that the “decipherments were not discoveries of secrets hidden by Roger Bacon but the products of his own intense enthusiasm and his learned and ingenious subconscious.” 20 th century American historian Lynn Thorndike threw more salt into the wounds in a scathing piece directed at Newbold, which read, “There is hardly one chance in 50 that Roger Bacon had any connection to the production of the Voynich Manuscript.” In September 1926, Newbold died suddenly from “acute indigestion,” having spent the remainder of his life tortuously haunted by his mistakes and dogged by the ridicule of his peers.

One of the first who stepped forward to disprove Newbold's theories – effectively demolishing his credibility and tarnishing his legacy – was

William Friedman, another cryptographer for the U.S. Army. Friedman, hailed by historian David Kahn as the “world's greatest cryptologist,” rose to prominence after cracking the Japanese Purple Cipher in World War II, and he is said to have been the first to utilize computers as a tool for textual decryption. In 1925, Manly invited Friedman and his wife, another talented decoder, to take a swing at the Voynich Manuscript. The couple was certainly titillated, but by the Second World War, they were forced to place the project on the back burner until 1944. That year, they founded the Voynich Manuscript Study Group.

Friedman

Its members, composed of colleagues and other prestigious code-breakers, spent the next four decades poring over the pictures that Manly sent them, but like those that had come before them, they failed miserably. Friedman and his wife evidently took this in much better stride, for they admitted their defeat in the form of an article in 1959 entitled “Acrostics, Anagrams, and Chaucer,” published in the *Philogical Quarterly.* The article, which expressed a distaste for “annagramatic ciphers,” included a set of jumbled words, that when

solved, was revealed to be an anagram itself. When Friedman died 11 years later, the editor of the *Philogical Quarterly* republished the article, as well as the long-awaited answer to the brain teaser, which summed up the team's final statement: “The Voynich Manuscript was an early attempt to construct an artificial or universal language of the a priori type. – Friedman.”

One early morning in March 1930, following a lengthy and harrowing battle with abdominal cancer, Voynich drew his final ragged breaths and shut his eyes for the last time. He was survived by his wife, Ethel, who eventually chose to relinquish the family heirloom, and by 1961, it had been sold to Hans Peter Kraus, a Viennese maven of medieval manuscripts. She settled for a sum of $24,500, and was promised half its profits if Kraus were to succeed in landing a buyer.

Kraus was determined to secure the prodigious deal that Voynich and Newbold had lusted after for so long, so for several years, Kraus hired a team of restoration experts. For a time, he even prohibited any other decoders from physical access to the manuscript. Though the manuscript had not budged an inch when Voynich priced it at $100,000, Kraus went ahead and pushed it for the cosmic sum of $160,000. As to be expected, not many had such dough to even spare in the first place, and even fewer were willing to part with such a hefty sum. Finally, hoping to alleviate the headache, Kraus threw in the towel and donated the codex to the Beinecke Library at Yale University, where it continues to reside as “MS-408.”

Legacy

“This is a trap, not a trot. Actually I can see no apt way of unraveling the rare Voynich Manuscript. For me, defeat is grim.” – One of the anonymous submissions to Friedman's brain teaser

To this day, the Voynich Manuscript has yet to be decoded, leaving the world's greatest cryptographers and armchair sleuths dazed and dumbstruck. While many tenaciously maintain the manuscript's authenticity, more and more have begun to cry “hoax.” Some say that the truth behind the mystery of the manuscript is so simple, it was perched on the tip of their nose the entire time. Could it be that Voynich, the same man who brought the cryptic codex to the attention of the modern world, had been so desperate for fame

that he inadvertently fabricated one of the greatest scams the world has ever known?

Even before the scandal unraveled, Voynich, the cynical say, was in no way struggling to keep himself afloat, but halfway into his career, progress had become stagnant. This theory has it that when Ethel, an illustrious wordsmith herself, began to gain traction in her sphere that her jealous husband began to rack his brain for a game-changing sales tactic that would take the globe by storm, and when he could not track down this golden goose, he decided to take matters into his own hands. Most compelling of all, on top of Voynich's convenient background in pharmaceuticals, there was his tainted track record, as he once sold a forged copy of the *Columbus Miniature.* What was more, witnesses claimed he was fully aware of its true origin.

The onslaught of theories and what-ifs that continue to be associated with the manuscript never end. Some have tried to tie the manuscript to a young Leonardo da Vinci, and even – as is commonly the case with such matters – extraterrestrial oracles. But at the end of the day, not all historians are so jaded. Based on recent studies, not only does the secretive script of the manuscript follow "traditional linguistic rules," its ink has been determined to be genuine. Through carbon dating, experts are also confident that the vellum dates back to at least 1420. Furthermore, most agree that the "swallowtail castles" found in the Rosettes, native to Northern Italy, hints at the author's ethnicity.

As for now, one can only wait for time to crack its code.

Online Resources

Other books about the Renaissance by Charles River Editors

Other books about the Voynich Manuscript on Amazon

Bibliography

Johnson, R. (2013, July 9). The Unread: The Mystery of the Voynich Manuscript. Retrieved August 22, 2017, from http://www.newyorker.com/books/page-turner/the-unread-the-mystery-of-the-voynich-manuscript

Zandbergen, R. (2017, February 26). The Voynich MS - Biographies. Retrieved August 22, 2017, from http://www.voynich.nu/curricula.html

Editors, C. M. (2014, December 5). VOYNICH THEORIES. Retrieved August 22, 2017, from http://ciphermysteries.com/the-voynich-manuscript/voynich-theories

Kean, D. (2017, July 5). Author of mysterious Voynich manuscript was Italian Jew, says scholar. Retrieved August 22, 2017, from https://www.theguardian.com/books/2017/jul/05/author-of-mysterious-voynich-manuscript-was-italian-jew-says-scholar

LaPointe, M. (2016, December 1). The Pleasures of Incomprehensibility. Retrieved August 22, 2017, from https://www.theparisreview.org/blog/2016/12/01/the-pleasures-of-incomprehensibility/

Poe, E. A. (2013, May 15). A FEW WORDS ON SECRET WRITING. Retrieved August 22, 2017, from https://www.eapoe.org/works/essays/fwsw0741.htm

Editors, R. H. (2013, August 14). A Brief History of Cryptography. Retrieved August 22, 2017, from https://access.redhat.com/blogs/766093/posts/1976023

Editors, E. (2015, January 7). Cryptography Background. Retrieved August 22, 2017, from http://ethw.org/Cryptography

Ruddick, G. (2013, March 19). What is Data Encryption? Retrieved August 22, 2017, from http://blog.productcentral.aol.com/2013/03/19/data-encryption

Editors, G. M. (2012). The Voynich Question. Retrieved August 22, 2017, from http://nabataea.net/vhistory.html

Zandbergen, R. (2017, April 16). The 'discovery' of the Voynich MS by Wilfrid Voynich. Retrieved August 22, 2017, from http://www.voynich.nu/extra/mondragone.html

Editors, H. B. (2017, March 23). The Found Manuscript of Wilfrid Voynich. Retrieved August 22, 2017, from

http://www.historicalblindness.com/blogandpodcast//the-found-manuscript-of-wilfrid-voynich

Kahn, D. (1996, July 2). The Codebreakers: The Story of Secret Writing. Retrieved August 22, 2017, from https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol12i3/html/v12i3a09p_0001.htm

Finley, K. (2017, January 30). HALF THE WEB IS NOW ENCRYPTED. THAT MAKES EVERYONE SAFER. Retrieved August 22, 2017, from https://www.wired.com/2017/01/half-web-now-encrypted-makes-everyone-safer/

Simkin, J. (1997, September). Sergei Kravchinsky. Retrieved August 22, 2017, from http://spartacus-educational.com/RUSkravchinskii.htm

Editors, W. (2017, March 16). Piotr Bardowski. Retrieved August 22, 2017, from https://pl.wikipedia.org/wiki/Piotr_Bardowski

Zandbergen, R. (2017, May 17). The Voynich MS - General Introduction. Retrieved August 22, 2017, from http://www.voynich.nu/intro.html

Editors, P. (2011). Painting Techniques. Retrieved August 22, 2017, from http://www.webexhibits.org/pigments/intro/renaissance.html

Zandbergen, R. (2017, July 12). Description of the Voynich MS. Retrieved August 22, 2017, from http://www.voynich.nu/descr.html

Sherwood, E., PhD. (2008). The Voynich Botanical Plants. Retrieved August 23, 2017, from http://www.edithsherwood.com/voynich_botanical_plants/

Flood, A. (2014, February 7). New clue to Voynich manuscript mystery. Retrieved August 23, 2017, from https://www.theguardian.com/books/2014/feb/07/new-clue-voynich-manuscript-mystery

Editors, V. B. (2015, October 12). The Herbal Jars in the Voynich. Retrieved August 23, 2017, from http://voynichbirths.blogspot.tw/2014/09/the-herbal-jars-in-voynich.html

Schmeh, K. (2011, Jan. & feb.). The Voynich Manuscript: The Book

Nobody Can Rea. Retrieved August 23, 2017, from http://www.csicop.org/si/show/the_voynich_manuscript_the_book_nobody_c

Petersen, J. K. (2013, July 27). The Voynich Zodiac Symbols. Retrieved August 23, 2017, from http://voynichportal.com/2013/07/27/the-voynich-zodiacs/

Editors, L. M. (2008, August 22). The Voynich Manuscript. Retrieved August 23, 2017, from http://www.languedocmysteries.info/voynich.htm

Pelling, N. (2015, June 29). THE VOYNICH MANUSCRIPT'S THREE CROWNS…. Retrieved August 23, 2017, from http://ciphermysteries.com/2015/06/29/the-voynich-manuscripts-three-crowns

Velinska, E. (2013, September 11). The Voynich Manuscript: Anatomy. Retrieved August 23, 2017, from http://ellievelinska.blogspot.tw/2013/09/the-voynich-manuscript-anatomy.html

Editors, V. B. (2014, February 17). No one here but us "nymphs". Retrieved August 24, 2017, from http://voynichbirths.blogspot.tw/2014/05/cranach-and-voynich-manuscript.html

Davis, L. F. (2015, January 17). Manuscript Road Trip: The World's Most Mysterious Manuscript. Retrieved August 24, 2017, from https://manuscriptroadtrip.wordpress.com/2015/01/17/manuscript-road-trip-the-worlds-most-mysterious-manuscript/

Feaster, P. (2015, April 1). Primeval Animations and the Voynich Manuscript. Retrieved August 24, 2017, from https://griffonagedotcom.wordpress.com/2015/04/01/primeval-animations-and-the-voynich-manuscript/

Bax, S. (2014, April 28). Voynich: the punctuation problem. Retrieved August 24, 2017, from https://stephenbax.net/?p=940

Petersen, J. K. (2013, July 19). Large Plants – Folio 32r. Retrieved August 24, 2017, from http://voynichportal.com/tag/folio-32r/

Editors, I. C. (1998, January 17). Is f33v a sunflower? Retrieved August 24, 2017, from http://www.ic.unicamp.br/~stolfi/voynich/98-01-17-sunflower/

Cohen, C. (2016, October 18). Voynich Rosette Map Records An Ancient Pilgrimage. Retrieved August 24, 2017, from http://voynichbirths.blogspot.tw/2015/11/voynich-rosette-map-records-ancient.html

Blumberg, N. (2016, November 29). Voynich manuscript. Retrieved August 24, 2017, from https://www.britannica.com/topic/Voynich-manuscript

Cummings, M. (2016, October 31). Mysterious Voynich Manuscript reborn in facsimile edition. Retrieved August 24, 2017, from https://news.yale.edu/2016/10/31/mysterious-voynich-manuscript-reborn-facsimile-edition

Velinska, E. (2012, October 17). Voynich Manuscript: the Lemon Juice Arsonist. Retrieved August 24, 2017, from http://ellievelinska.blogspot.tw/2012/10/voynich-manuscript-lemon-juice-arsonist.html

Editors, V. T. (2013, July 14). New Look at the de Tepencz “Signature”. Retrieved August 24, 2017, from https://proto57.wordpress.com/2013/07/14/new-look-at-the-de-tepencz-signature/

Duffy, E. (2017, April 20). Secret Knowledge—or a Hoax? Retrieved August 24, 2017, from http://www.nybooks.com/articles/2017/04/20/voynich-manuscript-secret-knowledge-or-hoax/

Bos, J. (2011, September 12). Rudolf II of Austria. Retrieved August 24, 2017, from http://madmonarchs.guusbeltman.nl/madmonarchs/rudolf2/rudolf2_bio.htm

Harms, D. (1998). The Voynich Manuscript & the Necronomicon. Retrieved August 24, 2017, from http://www.bibliotecapleyades.net/ciencia/esp_ciencia_manuscrito06.htm

Editors, R. (2016, December 19). Jacobus Sinapius. Retrieved August 24, 2017, from https://www.revolvy.com/main/index.php?s=Jacobus%20Sinapius

Editors, C. M. (2002). History: Ancient, Classical and Medieval Alchemy. Retrieved August 24, 2017, from http://www.chm.bris.ac.uk/webprojects2002/tubb/history.htm

Editors, H. A. (2011). Edward Kelley. Retrieved August 24, 2017, from http://historyofalchemy.com/list-of-alchemists/edward-kelley/

Kennedy, J. W. (2017, June 18). How much does 80 ducats in Merchant of Venice convert to in modern money? Retrieved August 24, 2017, from https://www.quora.com/How-much-does-80-ducats-in-Merchant-of-Venice-convert-to-in-modern-money

Apiryon, T. (1995). Sir Edward Kelly. Retrieved August 24, 2017, from https://hermetic.com/sabazius/kelly

Livingstone, J. (2016, November 30). The Unsolvable Mysteries of the Voynich Manuscript. Retrieved August 24, 2017, from http://www.newyorker.com/books/page-turner/the-unsolvable-mysteries-of-the-voynich-manuscript

Zandbergen, R. (2017, August 19). Voynich MS - 17th Century letters related to the MS. Retrieved August 24, 2017, from http://www.voynich.nu/letters.html

Zandbergen, R. (2017, April 6). History of research of the Voynich MS. Retrieved August 24, 2017, from http://www.voynich.nu/solvers.html

McCormick, R. (2014, February 28). Decrypting the most mysterious book in the world. Retrieved August 25, 2017, from https://www.theverge.com/2014/2/28/5453596/voynich-manuscript-decrypting-the-most-mysterious-book-in-the-world

Pelling, N. (2009, December 28). ROGER BACON & THE VOYNICH MANUSCRIPT, REVISITED…. Retrieved August 25, 2017, from http://ciphermysteries.com/2009/12/28/roger-bacon-the-voynich-manuscript-revisited

Editors, E. U. (2008). Alchemy: Roger Bacon (c. 1220–1292). Retrieved August 25, 2017, from http://www.unexplainedstuff.com/Magic-and-Sorcery/Alchemy-Roger-bacon-c-1220-1292.html

Arbelaez, D. (2013, April 1). Why Is Roger Bacon The Mastermind Behind the Voynich Manuscript? Retrieved August 25, 2017, from http://davidisanauthor.weebly.com/why-is-roger-bacon-the-mastermind-behind-the-voynich-manuscript.html

Ungar-Sargon, B. (2013, April 15). CRACKING THE VOYNICH CODE. Retrieved August 25, 2017, from http://www.tabletmag.com/jewish-arts-and-culture/books/129131/cracking-the-voynich-code

Editors, V. T. (2016, March 23). The Modern Forgery Hypothesis. Retrieved August 25, 2017, from https://proto57.wordpress.com/2016/03/23/the-modern-forgery-hypothesis/

Bauer, C. P. (2017). *Unsolved!: The History and Mystery of the World's Greatest Ciphers from Ancient Egypt to Online Secret Societies* (Hardcover ed.). Princeton University Press.

Cordy, M. (2009). *The Source* (Mass Market Paperback). Corgi .

Kennedy, G., & Churchill, R. (2006). *The Voynich Manuscript: The Mysterious Code That Has Defied Interpretation for Centuries* (3rd ed.). Inner Traditions.

Goldstone, L., & Goldstone, N. (2005). *The Friar and the Cipher: Roger Bacon and the Unsolved Mystery of the Most Unusual Manuscript in the World* (1st ed.). Doubleday.

Steindl, K. T. (Director). (2014, January 14). The Voynich Code - The World's Most Mysterious Manuscript [Television series episode]. Indigenius.

The Voynich Mystery [Television series episode]. (2002, December 9). In *BBC Documentaries* . BBC.

Free Books by Charles River Editors

We have brand new titles available for free most days of the week. To see which of our titles are currently free, click on this link .